

National Weather Service's Fire Weather Program



Briefing by
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Western Region Director

Fire Weather

Background - Increasing Demands for Services

2000 Fire Season Worst in 50 yrs

- 93,000 wildfires/7.4 million acres
- Cost > \$2 Billion to fight

Increased Risk Due to:

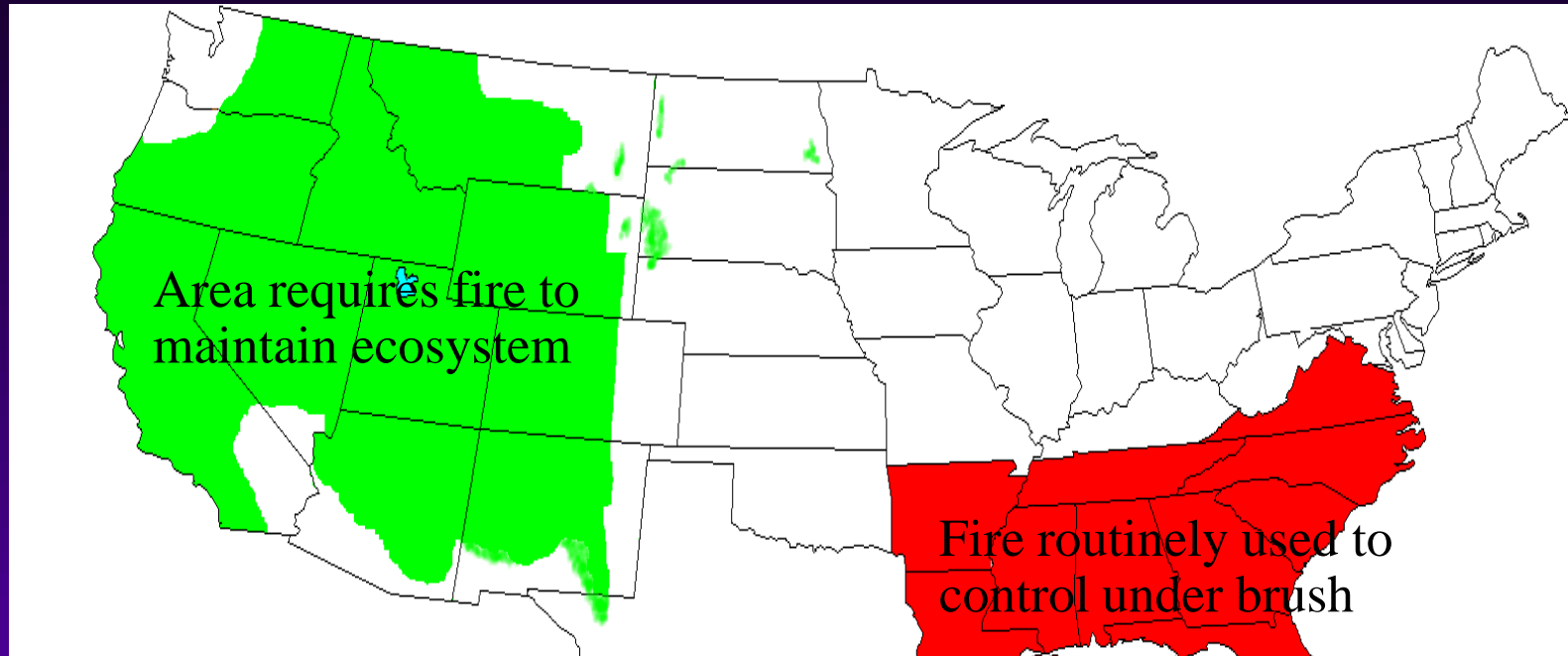
- Urbanization into wildlands
 - 2.5 Mil people/1 Mil structures at risk to wildfires in California

1991 Oakland fire - 25 lives lost



Fire Weather

Background - Increasing Demands for Service



Fire Weather

Major Service Program - National Center

Storm Prediction Center - Norman, OK

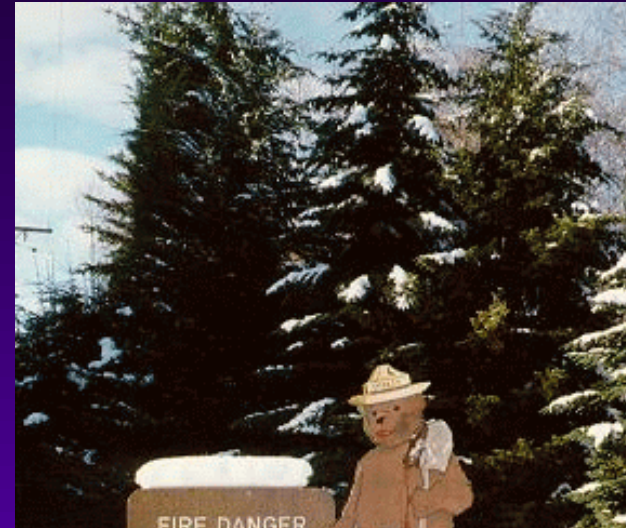
- ▶ Fire Weather Outlooks
 - Guidance for Day 1 and Day 2
 - Identifies critical areas of concern



Fire Weather

Major Service Program - Local Weather Forecast Office

- # Twice daily forecasts during fire season
 - Much more detailed than public forecasts
- # Daily Inputs into National Fire Danger Rating System

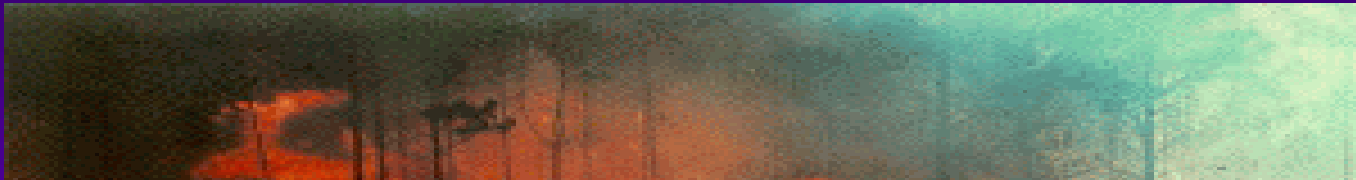


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Major Service Program - Local Weather Forecast Office Cont'd

Red Flag Warnings/Fire Weather Watches

- Issued when weather expected to cause extreme fire danger
- Issued in close coordination with land managers



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Major Service Program - Local Weather Forecast Office Cont'd

Spot Forecasts

- ▶ A key element for firefighter safety
- ▶ Issued for individual wildfires or prescribed burns - On Demand



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Improving Services for Spot Forecasts - WEB

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SPOT FORECASTS

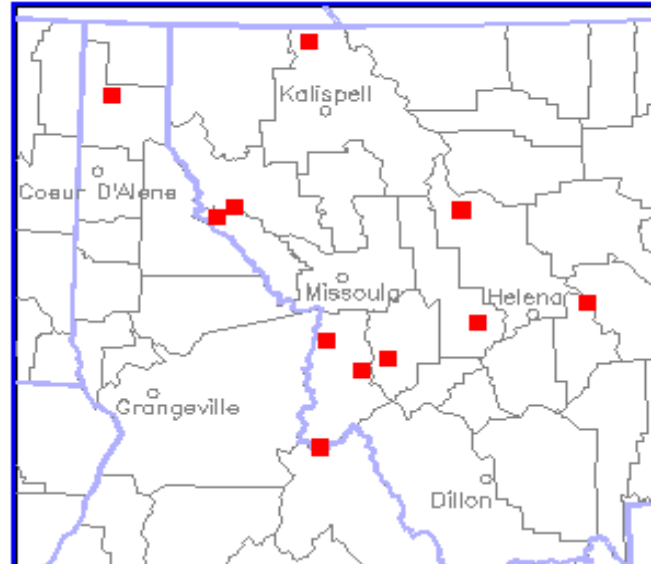
for

◀ May 24 1999 ▶

[CALENDAR](#)

(Last updated: 3:49 pm MDT)

[Submit a new Spot Request](#)



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Major Service Program - Local Weather Forecast Office Cont'd

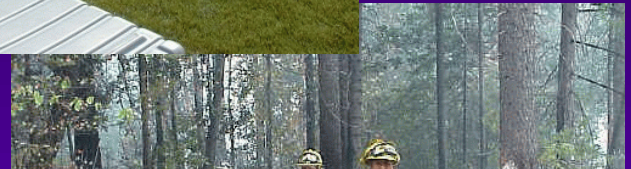
Weather Forecast Office InterNet Briefings

- Reaches multiple customers - includes graphics plus verbal briefing



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On-site Weather Support Increasing



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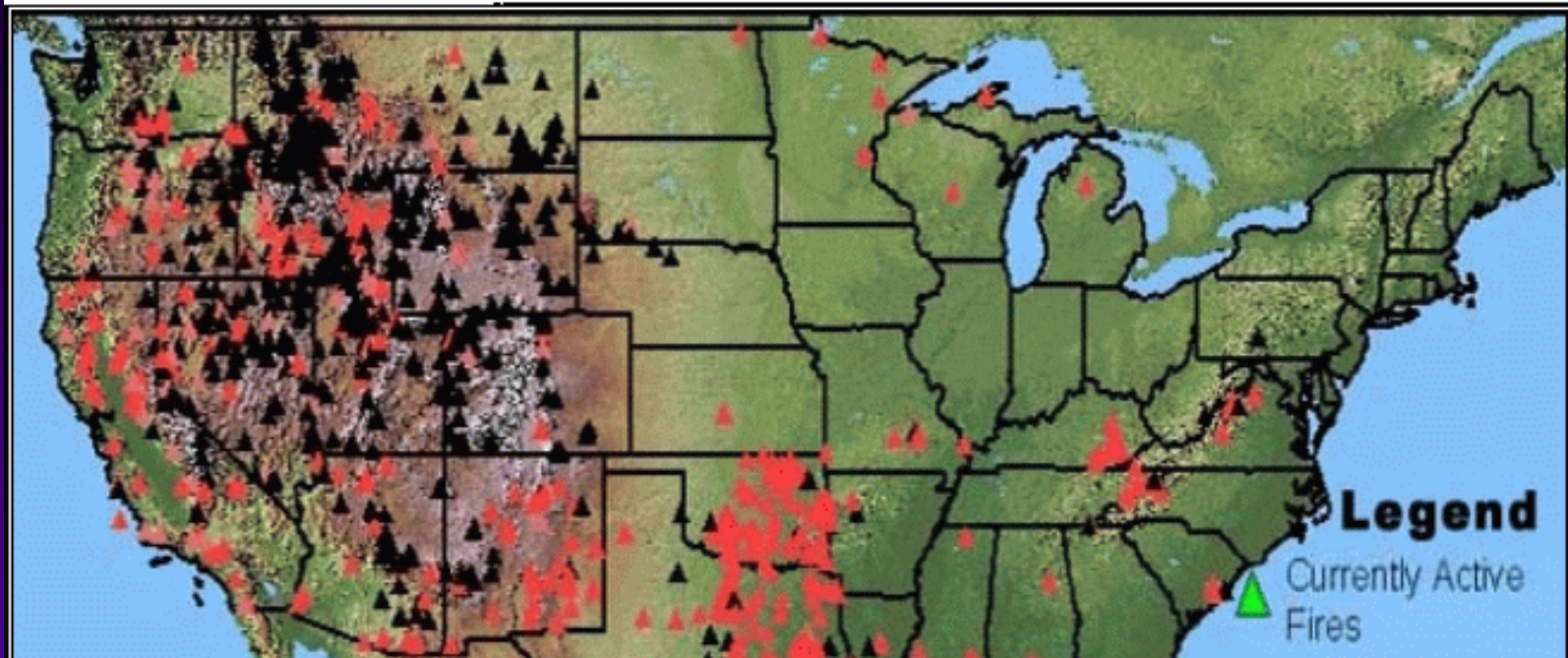
NWS On-site Services

Incident Meteorologists (IMETS)

- Part of Local Weather Forecast Office Staff
- Dispatched Nationally
- Assigned to fire teams or at Geographic Area Coordination Centers (GACC)
- Brings Portable Equipment called **A**dvanced **T**echnological **M**eteorological **U**nits (ATMU) to

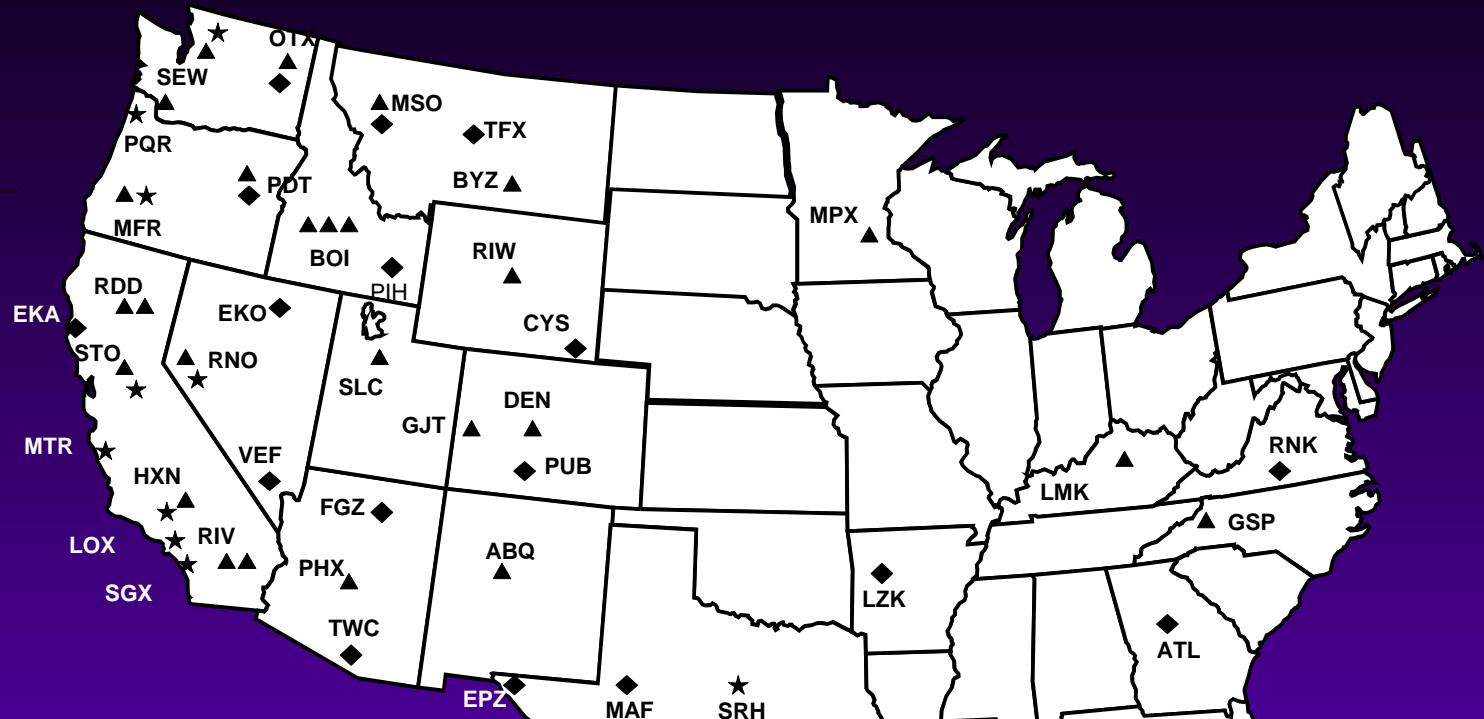
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Expanded from 30 IMETs in 1996 to 55+ in 2001



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ATMUs - Fire Weather Laptops and Satellite Comms



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Issues - DOI hiring 20 Meteorologists at Geographical Area Coordination Centers



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Issues - Special California Agreement

- # 2 Joint Interagency Fire Weather Operations in California -Redding/Riverside Centers
- # Final transition of fire weather services to NWS offices in 2003
- # Future roles and responsibilities uncertain

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Issues - Non Federal Non Wildfire Policy

Administration proposed and Congress Accepted -1996

- Intent to promote Private Sector
- Restricts NWS from providing Forecasts to State/Local Governments for their Prescribed Burns
- Consultation with State and Local Governments not permitted on non wildfire issues but permitted for

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Issues - Minimal Support to Smoke Management

- # Air Quality major hindrance to aggressive hazardous fuels reduction program
- # Poor Visibility from smoke direct cause of many traffic fatalities in southeast US
- # Current Operational Forecasts only provide generalized parameters



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Future Trends and Requirements

- # Replace Aging ATMU equipment and Infuse new AWIPS Technology
Next Generation ATMU

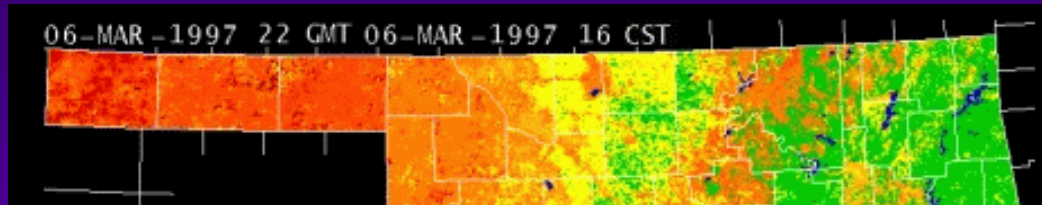
- # Better Coordination Tools
to interface with Fire



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Future Trends and Requirements

- # Expand fire weather forecast and guidance products especially graphical products
- # Increase the resolution and improve on model output sensitive to fire danger parameters i.e. better handling of moisture



Fire Weather - Summary

Integral part of NWS's Mission - Protection of Life and Property

“Forest Service could not have achieved its wildfire suppression goals and accomplished the fire line safety.... without the outstanding cooperation, expertise and service from the NWS.”